Labor Market Fluidity and Economic Performance

By
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Main Themes and Results

1. **U.S. labor markets became much less fluid in recent decades**
   - Rate of job reallocation across employers fell more than 25 percent since 1990
   - Rates of worker reallocation and churn fell more than 25 percent since 2000
   - Fluidity declines hold across states, industries, firm size and age categories, and demographic groups defined by age, gender and education
   - U.S. had large job reallocation rate declines compared to other countries (limited evidence)

2. **Many factors contributed to secular decline in fluidity, including:**
   - Shift of activity to older firms and establishments
   - Shift of activity to larger firms and establishments in some sectors (e.g., Retail Trade)
   - An aging workforce
   - Policy developments that suppress reallocation (e.g., erosion of employment-at-will and spread of occupational licensing and certification requirements)

3. **Reasons for Concern:**
   - Worker and job reallocation contribute to productivity and real wage growth
   - Reduced fluidity can negatively affect employment, especially for marginally attached workers and those with limited skills

4. **Key New Findings:**
   - Reduced fluidity leads to large declines in employment rates for the young and less educated
   - Our findings suggest the U.S. faced serious impediments to high employment rates before the Great Recession, and it is unlikely to return to sustained high employment without restoring labor market fluidity
Quarterly Rates of Worker Reallocation, Job Reallocation & Churn, U.S.

Nonfarm Private Sector

Annual Rates of Job Reallocation Across Firms and Establishments, U.S.
Nonfarm Private Sector

Worker Reallocation = Job Reallocation + Churn
(Hires + Separations)    (Creation + Destruction)
Annual Job Reallocation Rates in Selected U.S. Industry Sectors

Employment Share of Firms Five Years Old or Younger
Quarterly Worker and Job Reallocation Rates by Gender, Age and Educational Attainment

Worker Reallocation Rates by Age Groups, Males

Worker Reallocation Rates by Education, Males

Worker Reallocation Rates by Age Groups, Females

Worker Reallocation Rates by Education, Females
Annual Job Reallocation Rates across Firms, Changes over Time, Selected Countries

A. Country-Level Changes from 2002 to 2009

B. Country-Level Changes from 1988 to 1996
Why the Decline in Labor Market Fluidity?

• Taken together, shifts in the industry, age and size distribution of employment account for 15% of secular drop in job reallocation intensity
  • Shifts in the industry mix actually go the “wrong” way.

• An aging workforce contributes to declines in worker reallocation intensity – a bigger factor in the 1980s and early 1990s than 2000s

• Recent work finds that on-the-job training requirements rose in recent decades – an occupational mix effect, and greater training costs within occupations.

• Policy developments also suppressed fluidity. Two examples:
  • Occupational restrictions in the form of government-mandated licensing and certification requirements grew from 5% of jobs in the 1950s to 38% by 2008.
  • The employment-at-will doctrine eroded in recent decades, making it harder and costlier to fire workers. Common-law exceptions to the doctrine emerged in state-level judicial decisions from 1972 to 1999. Building on work by David Autor and others, we exploit differences in the timing of these exceptions to estimate their effects on reallocation intensity. We find that exceptions to employment-at-will reduce job reallocation, more so for smaller employers.

• As yet, we know little about how much these and other factors contributed to the secular decline in U.S. labor market fluidity.
Is Reduced Fluidity Cause for Concern?

1. Beneficial and benign aspects of reduced fluidity:
   A. Less job reallocation means fewer layoffs and smaller unemployment inflows.
   B. Reduced fluidity is a by-product of developments in specific sectors that raised productivity and improved consumer welfare: The shift away from small, independent stores to Wal-Mart and other big box retailers raised productivity, lowered prices, and increased product selection. This shift to larger firms and establishments brought lower rates of reallocation.

2. Reasons for concern:
   A. Available evidence says employers became less responsive to shocks, not that employer-level shocks became less variable.
   B. Reallocation plays a key role in prominent theories of innovation and growth.
   C. Factor reallocation flows are an important source of medium-term productivity growth according to many empirical studies.
   D. Fluidity facilitates job mobility, wage growth and career advancement.
   E. Fluidity promotes employment.
The Fluid Labor Markets Hypothesis

Hypothesis: Fluid labor markets promote high employment.

Mechanisms:

1. **Job creation incentives** (Shimer, 2001): Young workers tend to be less well matched to suitable jobs than older workers. When the youth share of the working-age population is high, average match quality is low, and employers with open job positions are more likely to encounter poorly matched workers. Easier recruiting, in turn, leads to higher equilibrium job creation and lower unemployment rates for workers of all ages.

2. **Human Capital Accumulation**: Fluid labor markets offer abundant opportunities to find a job, prospect for the “right” job, move up a job ladder, satisfy locational constraints, re-enter the labor market, etc. The result is both better opportunities and stronger incentives to accumulate market-relevant human capital, which, in turn, increases earnings capacity and strengthens work attachment. (This mechanism is especially relevant for younger and marginal workers, and those with limited skills.)

3. **Other**: The paper briefly discusses other employer-side and worker-side mechanisms that reinforce the negative employment effects due to the interaction between reduced fluidity and human capital accumulation. There is also a nice paper by Chris Pissarides that shows how job creation incentives and human capital interact to produce larger effects than either one in isolation.
Employment Rates by Age and Education for Selected Periods, Males

Males, less than high school

Males, high school

Males, some college

Males, college or higher
Employment Rates by Age and Education for Selected Periods, Females

Females, less than high school

Females, high school

Females, some college

Females, college and higher
Econometric Approach: Specification & Identification

1. Estimate effects of fluidity on state-level employment rates for groups defined by gender, education, and age.
   • Use variation within states and demographic groups

2. Regression Specification:
   • Three-year average outcomes and controls for state fixed effects
   • Controls for national and state-level cyclical conditions
   • Additional controls for presence of children and young children in the HH

3. Use IV to address endogeneity concerns, measurement error in fluidity variables, and to keep focus on low-frequency responses. Instruments:
   • Share of working-age population 18-24 years old in the state and time period
   • Abundance of less educated persons 25-31 in the state: relative to working-age population, and relative to population 25-31
   • Shifts in state-level reallocation intensity that derive from national shifts in the industry mix of employment and state’s legacy industry structure.
Actual and Predicted Changes in Employment Rates Implied by Changes in Fluidity, 1998-00 to 2010-11

Implied Elasticities for Male Employment Rates with Respect to Worker Reallocation Rates, IV Estimates for the 1998-2011 Sample

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Less than High School</th>
<th>High School</th>
<th>Some College</th>
<th>College</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;25</td>
<td>1.36</td>
<td>0.68</td>
<td>0.53</td>
<td>0.12</td>
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<tr>
<td>25-34</td>
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<td>0.30</td>
<td>0.15</td>
<td>0.09</td>
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<tr>
<td>35-54</td>
<td>0.32</td>
<td>0.19</td>
<td>0.08</td>
<td>0.06</td>
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<tr>
<td>55+</td>
<td>0.16</td>
<td>0.18</td>
<td>0.06</td>
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“Predicted changes” refer to the employment rate changes implied by actual changes in reallocation intensity, according to our IV regression estimates, holding fixed national and state controls for cyclical conditions, state effects, and controls for children under 18 and under 5.
Actual and Predicted Changes in Employment Rates Implied by Changes in Fluidity, 1998-00 to 2010-11, Males

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Actual and Predicted Changes in Employment Rates Implied by Changes in Fluidity, 1998-00 to 2010-11, By State (for 30 States Covered by QWI Data)

Actual and Predicted Changes in Employment Rates Implied by Changes in Fluidity, 1987-89 to 1999-01 And 1999-01 to 2008-10, By State (All 50 States)